30

35

We claim:

5

10

- A core/jacket catalyst molding with a core made from an inorganic support material and with a jacket made from a catalytically active material, obtainable by
 - coextruding an aqueous molding composition which comprises the support material or a precursor thereof, with an aqueous molding composition which comprises the catalytically active material or a precursor thereof,
 - · then drying the coextrudate, and
 - then calcining the dried coextrudate.
- 2. A catalyst molding as claimed in claim 1, wherein the catalytically active material catalyzes the hydrogenation, dehydrogenation, oxidation, isomerization or polymerization, or addition reactions, substitution reactions or elimination reactions of organic substances, and comprises metals or metal compounds of the 5th to 8th transition group of the Periodic Table, of groups IB or IIB, of the lanthanoids, of the elements Sn, Pb, As, Sb, Bi, Se or Te, or a mixture of these.
- A catalyst molding as claimed in claim 1, wherein the support material used comprises oxides, hydroxides or carbonates of the elements B, Al, Ga, Si, Ti, Zr, Zn, Mg or Ca, or a mixture of these.
- A catalyst molding as claimed in claim 1, wherein the support material used comprises activated carbon, graphite, and inorganic nitrides or carbides, or a mixture of these.
- A catalyst molding as claimed in claim 1, wherein the aqueous molding composition which comprises the support material or comprises a precursor thereof comprises a mixture made from

10 - 30% by weight

of at least one water-soluble binder,

25 - 50% by weight

of at least one inorganic support material or

precursor thereof,

2-20% by weight

of at least one peptizing agent,

15

1-5% by weight

of at least one plasticizer,

20 - 60% by weight

of water,

where the total amount of the ingredients gives 100% by weight.

 A catalyst molding as claimed in claim 1, wherein the aqueous molding composition which comprises the catalytically active material or comprises a precursor thereof comprises a mixture made from

10 - 30% by weight of at

of at least one water-soluble binder,

0-20% by weight

of at least one inorganic support material or

precursor thereof,

10 - 40% by weight

of at least one catalytically active material

or of a precursor thereof

2 - 20% by weight

of at least one peptizing agent,

1 – 5% by weight

of at least one plasticizer,

0.5 - 2% by weight

of at least one lubricant,

20 - 60% by weight

of water.

where the total amount of the ingredients gives 100% by weight.

- A catalyst molding as claimed in claim 1, wherein the molding compositions used for the preparation process have essentially the same shrinkage behavior on drying.
- 8. A catalyst molding as claimed in claim 1, wherein an arrangement of two extruders is selected for the preparation process, so that during the extrusion process an jacketing phase made from catalytically active material concentrically surrounds a compact core made from support material.
- A process for preparing a core/jacket catalyst molding as claimed in claim 1, which
 comprises carrying out the stated steps.